

Online Instructor-led Training

S5 Maintenance & Programming 1 - Virtual

General Information

Course Code: SCT-S5OILSP5G1A
Length: 5 days, 5 hours a day

Audience

This virtual course is for maintenance technicians and controls engineers who are responsible for sustaining and upgrading SIMATIC S5 systems and their programs.

Prerequisites

- Computer and MS Windows expertise

Profile

2.5 CEUs (Continuing Education Credits)

This virtual course provides the basic skills necessary to troubleshoot S5 hardware and modify programs using STEP5 software. Students will build skills with a typical S5 hardware sustaining ranging from module wiring and configuration to parameterization and addressing. In addition, students will use STEP5 software to aid in troubleshooting the system. This course includes basic system program modifications and program development using the STEP5 Basic Operation Set. Students are taught to modify and develop programs with three program editors: Ladder Logic, Statement List and Control System Flow Chart. Access to fully functional STEP5 software, virtual tools, and exercises are provided through a cloud-based application.

Objectives

Upon completion of this course, the student shall be able to:

- Build a basic S5 hardware configuration
- Troubleshoot the system hardware using status indicators and STEP5 software tools
- Program discrete logic operations (AND, OR, etc.)
- Create and edit documentation
- Program timers and counters (time, count events, etc.)
- Program comparison operations
- Program integer math operations
- Troubleshoot common software errors

Topics

1. Fundamental control concepts
2. Programming basics
3. Hardware overview
4. Digital operations
5. Counters, compares, and arithmetic
6. Timer operations
7. Introduction to Data and Function blocks
8. Troubleshooting